November 6, 2017

North Carolina Department of Environmental Quality

To: William Denton,
Regional Engineer
Division of Energy, Mining, and Land Resources
N.C. Department of Environmental Quality
bill.denton@ncdenr.gov

Re: Atlantic Coast Pipeline LLC, and Dominion Transmission, Inc. Erosion and Sediment Control Plans

The Sierra Club appreciates your leadership on protecting North Carolina's places, prosperity, and people. It has been a pleasure to highlight the Department's stewardship for our 70,000 members and supporters, a number of whom live along the route of this proposed pipeline. Kirk Bowers, our reviewer for these erosion control plans is a licensed professional engineer with over 30 years experience as a land development engineer. He served as the Erosion Control Program Administrator for Greene County and Stafford County, VA and was a licensed Combined Administrator for the Virginia Erosion Control Program.

As you know, the Sierra Club opposes the proposed Atlantic Coast Pipeline because it relies on self-dealing for demand, threatens our water quality, and would trigger respiratory illnesses by degrading air quality. We greatly appreciate the Division of Energy, Mineral and Land Resources disapproving the inadequate erosion and sediment control plans once already. Attached, please find summarized and detailed comments regarding the new flawed erosion and sedimentation plans that ACP, LLC submitted to the Department. The Sierra Club finds these plans lacking details, with inadequate verification of engineering design criteria requirements which would ensure protection of North Carolina's land and water.

The Atlantic Coast Pipeline proposes to construct a large diameter pipeline across numerous wetlands without adequate protection. The erosion control measures shown on the plans include belted silt fence, compost filter socks and COIR logs. However, the drainage areas and slope lengths for drainage areas are not shown on the plans. It is not possible to determine whether the proposed erosion control measures will function as intended because drainage area information is not shown on plans. The drainage areas and slopes lengths were not shown to verify that the erosion control measures do not exceed engineering design criteria.

It is highly doubtful the erosion control devices will be maintained on a daily basis as required by the erosion control plan narrative, unless constant monitoring of the job site by erosion control inspectors is required and enforced. There are numerous reported cases of contractors not properly installing or maintaining erosion control devices, such as with the Sunoco

Mariner East 2 Pipeline Project and the Rover Pipeline Project. These projects have been halted by state environmental agencies due to hundreds of construction, maintenance, and operation violations that resulted in significant avoidable sedimentation and erosion, and the release of millions of gallons of drilling fluids. Pipeline companies, such as ACP, LLC, are incentivized to reduce construction time and cost at the expense of the public's health and safety, and the environment, and must be held to the highest standards.

The Sierra Club is concerned about the short- and long-term effects of pipeline construction on our state's waterways as well as the people, businesses, and communities that depend on them for cultural and financial reasons. We appreciate your willingness to consider opposition from residents and experts and are happy to assist further if you would like more input. Thank you for reviewing our comments.

Sincerely,

Kelly Martin
Director, Beyond Dirty Fuels
The Sierra Club
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Cc:
John Nicholson, Assistant Secretary of the Department of Environmental Quality
Bridget Munger, Public Information Officer, Water Resources

Plan Sheet	Review Comment
Construction profile for all sheets	Show the pipeline profile in the erosion control plan profiles. This will give the contractor guidance on grading of adjacent areas and slopes for placement of erosion control devices. Indicate on profile areas of non-typical depths that require deeper trenching for pipeline.
General Monitoring and Remediation	A monitoring and remediation period shall be provided of no less than three years immediately following the full-length activation of the pipeline or the completion of initial right-of-way restoration, whichever occurs last. The pipeline company shall be responsible for the cost of the monitoring and remediation. The three-year period allows for the effects of climatic cycles such as frost action, precipitation and growing seasons to occur, from which various monitoring determinations can be made. The monitoring and remediation phase shall be used to identify any remaining impacts associated with the pipeline construction that are in need of correction and to implement the follow-up restoration.
Slope conveyance channels	Provide design calculations for cross sections and method of stabilization for the planned channels and the temporary diversion. Include appropriate permissible velocity and/or shear stress data. Provide liners/matting where indicated. If liners/matting is to be installed, provide a plan detail, construction specifications, and maintenance requirements. Identify the type of liner and the location of the liner to be installed. Include the installation of liners in the construction sequence.
Design Criteria for Belted Steel Silt Fence	Maximum slope lengths above BSRF: Less than 2% slope - 100 feet. Slopes 2% to 5% - 75 feet. Slopes 5% to 10% - 50 feet. Slopes 10% to 20% - 25 feet. Check slope lengths above BSRF to insure compliance with design criteria.
Design Criteria for Belted Steel Silt Fence	Design Criteria: Where all runoff is to be stored behind the sediment barrier (where no storm water disposal system is present), maximum continuous slope length behind a sediment barrier shall not exceed those shown in the following table. For longer slope lengths, slope interrupters must be used. The drainage area shall not exceed ¼ acre for every 100 feet of sediment barrier.
Construction sequence	Provide a detailed/specific construction sequence that coordinates the timing of land disturbing activities and the installation and removal of all proposed erosion and sedimentation control measures. Provide a construction sequence for all phases of construction (including clearing and grubbing, pipe installation).
Compost filter socks	Socks with diameters less than 12" should only be used for drainage areas of ¼ acre or less. The drainage area shall not exceed ¼ acre for every 100 ft of compost filter sock. What size of filter sock is specified for use on-site? There is only one size shown and it is not specified. Check the slope lengths to insure that the size of the compost socks meets design criteria for maximum slope lengths above compost socks.
COIR log	What size of COIR log is specified for use on the plans? Give details for COIR log sizes in plans. The size is not specified on the construction plans. What types of vegetation will be planted with the COIR logs?
Waterbar outlets	Include details for waterbar outlets in plans. Waterbar outlets are shown on plans, but there are no construction details.
Random Sheets review	

E176	No elevations or contour lines are shown for existing topography. Show contours on plan sheet.
E180	Check maximum slopes lengths and drainage areas for Belted Steel Silt Fence shown near Station 9627+00. The slopes and drainage areas appear to exceed design limitations.
E180	Stream crossing at Station 9034+82 is 40 feet wide. What stream crossing method will be used to cross this stream? Specify crossing method on plan view. Open cut methods would create excessive sediment loading to stream crossing and adjacent wetlands.
E181	Stations 9062+00 to 9082+00 shows a 2000 foot section flowing to a Belted silt fence uphill of a wetlands area. Check drainage areas and slope lengths flowing to belted silt fence for compliance with engineering design criteria.
E185	Stations 9274+00 to 9280+00 shows the pipeline crossing a stream twice and the pipeline is located right next to the stream with no buffer. The alignment provides no buffer between the stream and pipeline right of way. A system of diversion dikes in place of belted silt fence would be more effective and require less maintenance during construction. The alignment in this location should be moved to the west, which would avoid the stream crossings in this area. Why was this route alignment chosen?
E007	Offsite drainage areas flow to belted silt fence shown at Stations 6000+00 to 6200+00, Stations 6600+00 to 7000+00 and Stations 7400+00 to 7600+00. There are no drainage areas shown for offsite drainage. Does the drainage area exceed engineering design criteria for maximum drainage areas flowing to the BSRF? Check lengths of slopes for site conditions to insure that slope lengths do not exceed engineering design criteria. Recommend replacing BSRF with diversion dikes with outlet protection as they are easier to install and require less maintenance.
E007	Station 7500+00 shows a BSRF located uphill from pipeline trench which passes through wetlands area. Replace BSRF with COIR log through wetlands area.
E007	Stations 104+29 to 104+59 shows a stream crossing. Indicate method for crossing stream on plan view. What time of the year will the stream crossing occur? Open cut methods are not appropriate for a 30 foot wide stream crossing. Excessive sediment would be released into stream during and after construction.
E007	Offsite drainage areas flow to belted silt fence shown at Station 108+00. There are no drainage areas shown for offsite drainage. Does the drainage area exceed engineering design criteria for maximum drainage areas flowing to the BSRF? Check lengths of slopes for site conditions to insure that slope lengths do not exceed engineering design criteria. Recommend replacing BSRF with diversion dikes with outlet protection as they are easier to install and require less maintenance.